

**National Transportation Safety Board  
Washington, DC 20594**

**Brief of Accident**

**Adopted 08/26/2003**

DEN02LA093		08/09/2002		Grand Junction, CO		Aircraft Reg No. N111KC		Time (Local): 13:45 MDT			
Make/Model:		Cessna / 310N				Fatal		Serious		Minor/None	
Engine Make/Model:		Lycoming / TIO-540-A2B				Crew		0		0	
Aircraft Damage:		Substantial				Pass		0		0	
Number of Engines:		2									
Operating Certificate(s):		None									
Type of Flight Operation:		Personal									
Reg. Flight Conducted Under:		Part 91: General Aviation									
Last Depart. Point:		Pueblo, CO				Condition of Light:		Day			
Destination:		Glenwood Spring, CO				Weather Info Src:		Weather Observation Facility			
Airport Proximity:		On Airport				Basic Weather:		Visual Conditions			
Airport Name:		Grand Junction				Lowest Ceiling:		None			
Runway Identification:		29				Visibility:		10.00 SM			
Runway Length/Width (Ft):		10500 / 150				Wind Dir/Speed:		310 / 011 Kts			
Runway Surface:		Asphalt				Temperature (°C):		33			
Runway Surface Condition:		Dry				Precip/Obscuration:		None / None			
Pilot-in-Command		Age: 55				Flight Time (Hours)					
Certificate(s)/Rating(s)						Total All Aircraft:		6488			
Airline Transport; Flight Instructor; Commercial; Multi-engine Land; Single-engine Land;						Last 90 Days:		116			
Instrument Ratings						Total Make/Model:		336			
Airplane						Total Instrument Time:		463			

According to the instructor, the pilot receiving instruction made a hard landing. The instructor took the controls and initiated a go-around. Suspecting landing gear damage, he kept the landing gear extended and diverted to a nearby airport. On the approach, the right main landing gear fell off the aircraft. Because of the limited emergency equipment at the second airport, he was advised to divert to a third airport. While keeping the landing gear extended, they made a low pass over the runway, and witnesses confirmed the missing right main landing gear. The instructor retracted the landing gear and made an intentional gear-up landing. The airplane sustained extensive damage to the lower fuselage skin and bulkheads and substantial damage to the right main landing gear attachment point.

Brief of Accident (Continued)

DEN02LA093				
File No. 13758	08/09/2002	Grand Junction, CO	Aircraft Reg No. N111KC	Time (Local): 13:45 MDT

---

Occurrence #1:     HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) AIRCRAFT CONTROL - INADEQUATE - DUAL STUDENT
2. (F) AIRSPEED - NOT MAINTAINED - DUAL STUDENT
3. (F) FLARE - HIGH - DUAL STUDENT
4. (F) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
5. GO-AROUND - INITIATED - PILOT IN COMMAND(CFI)

-----

Occurrence #2:     MISCELLANEOUS/OTHER  
Phase of Operation: CRUISE

Findings

6. (F) LANDING GEAR,MAIN GEAR - SEPARATION

-----

Occurrence #3:     WHEELS UP LANDING  
Phase of Operation: EMERGENCY LANDING

Findings

7. (F) WHEELS UP LANDING - INTENTIONAL - PILOT IN COMMAND(CFI)

Findings Legend: (C) = Cause, (F) = Factor

---

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.  
The dual student's inadequate aircraft control resulting in a hard landing. Contributing factors include, the dual student's inadequate airspeed and high flare, the inadequate supervision by the instructor, the in-flight separation of the right main landing gear and the intentional wheels-up landing.